

REMARKSPriority

Applicants have amended the specification to remove the priority claim to provisional application 60/093,321.

Rejection of the claims under 35 USC 102:

Claims 14-19 and 23-26 have been rejected under 35 U.S.C. 102(b) as being anticipated by Bolcsak et al. Applicants have amended the claims to obviate the rejection. Specifically, claims 1 and 26 have been amended to incorporate the step of polymerizing the amphipathic compounds. Support for the amendment can be found in the specification on page 13 lines 18-22 and page 21 lines 15-18 and former claims 18-19. Bolcsak et al. does not teach polymerization of a reverse micelle.

Claims 20-22 have been rejected under 35 U.S.C. 102(e) as being anticipated by Grinstaff et al. Applicants have amended the claims as described above in response the Bolcsak et al. § 102 rejection.

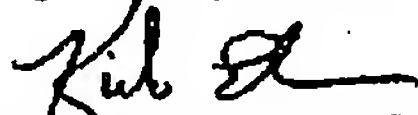
Currently amended claim 16 and new claim 28 are supported in the specification on page 3 line 24 to page 4 line 9, page 9 line 10 to page 10 line 6, page 13 lines 18-22, page 15 line 21 to page 17 line 12, and page 21 lines 15-20.

Currently amended claims 24 and 25 and new claims 29 and 30 are supported in the specification on page 10 line 8 to page 11 line 3 and page 17 lines 14-20.

New claim 31 is supported in the specification in the abstract and on page 9 lines 16-19 and page 14 lines 23-26

The Examiner's rejections are now believed to be overcome by this response to the Office Action. In view of Applicants' amendment and arguments, it is submitted that claims 14-17, 20, and 23-31 should be allowable.

Respectfully submitted,



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I hereby certify that this correspondence is being facsimile transmitted to the USPTO at 703-872-8308 or deposited with the United States Postal Service with sufficient postage as express mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22319-1450 on this date: 9/4/05


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[REPLACEMENT SHEET]

Micellar Systems

- 5 This application is a divisional of Application No. 10/081,461; filed February 21, 2002, which is a continuation-in-part of Application No. 09/354,957, filed July 16, 1999, issued as U.S. Patent 6,429,200, ~~which claims the benefit of U.S. Provisional Application No. 60/093,321, filed 07/17/1998.~~

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N/A

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Field of the Invention

The invention generally relates to micellar systems for use in biologic systems. More particularly, a process is provided for the use of reverse micelles for the delivery of nucleic acids and genes to cells.

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Background

- Biologically active compounds such as proteins, enzymes, and nucleic acids have been delivered to the cells using amphipathic compounds that contain both hydrophobic and hydrophilic domains. Typically these amphipathic compounds are organized into vesicular structures such as liposomes, micellar, or inverse micellar structures. Liposomes can contain an aqueous volume that is entirely enclosed by a membrane composed of lipid molecules (usually phospholipids) (R.C. New, p. 1, chapter 1, "Introduction" in Liposomes: A Practical Approach, ed. R.C. New IRL Press at Oxford University Press, Oxford, 1990). Micelles and inverse micelles are microscopic vesicles that contain
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- 30 amphipathic molecules but do not contain an aqueous volume that is entirely enclosed by a